Saskatchewan Commercial Fishing Industry

Sector Partnership Human Resource & Training Needs Assessment Study

July, 2001

FINAL REPORT

THE Trimension™ GROUP

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Executive Summary

Introduction

The commercial fishing industry is a vital part of the Northern economy of Saskatchewan. It is estimated that the direct value of the industry in Saskatchewan is 5.2 million dollars. This industry represents a major contribution to the economy of northern communities where high unemployment results in social and economic hardship to the residents. There are 35 communities in the north where commercial fishers reside and whose primary source of income is from commercial fishing. In many of these communities this is the largest and sometimes the only sector outside of the public service where people are employed.

The industry has a long history in the province and at one time contributed greatly to the economy. For many reasons, including: less localized processing plants; changes in demand for fish by consumers and prices paid to fishermen; to name a few, there has been a steady decline, to a point that today the industry is in threat of disappearing. A recent major economic development study which examined the commercial fishing industry in Saskatchewan revealed that by overcoming a number of barriers there is a significant opportunity to increase production and to undertake processing operations particularly for the underutilized species of our lakes and rivers.

As a result of these opportunities and the past difficulties the Saskatchewan Commercial Fishermen's Co-operative Federation Limited (SCFCFL) approached Trimension Training & Consulting Group Inc. and Spruce River Research to develop and submit a concept proposal to Saskatchewan Post-Secondary Education and Skills Training Sector Partnership Program to sponsor a study of the human resource and training needs of the commercial fishing industry in Saskatchewan.

The industry has, over the past number of years, had difficulty with a skill shortage of adequately trained fishers, helpers, packing plant workers and process workers, along with limited support for developing and enhancing the twenty-nine (29) fishermen's co-operatives and one (1) association operating in the province. Human resource development and upgrading, particularly for the fishers, is critical for the industry's longer term development and expansion.

The SCFCFL recognizes that it has to assume a greater responsibility to its member co-operatives and their members for training and human resource decisions to the industry and other stakeholders who are closest to the labour market.

The SCFCFL believes it will benefit by taking responsibility for identifying and addressing its own human resource and training needs. They, along with their partners such as Freshwater Fish Marketing Corporation (FFMC), Saskatchewan Northern Affairs (SNA) and Saskatchewan Environment and Resource Management (SERM), can work with and improve the training system for the benefit of existing and prospective employers and employees.

This study was initiated on behalf of the Commercial Fishing Industry Sector Partnership which views the human resource and training needs of its fishers and employees as critical for the

sustainability and growth of the industry in Saskatchewan. This study was sponsored by the Saskatchewan Post-Secondary Education and Skills Training Sector Partnerships Program.

Methodology

This report addresses the human resources and training needs of the commercial fishing industry of Saskatchewan. It summarizes the major findings from research undertaken and the recommendations developed by the Sector Partnership Steering Committee.

The methodology included a research program throughout the industry:

- a documentation/literature review of relevant previous studies and reports;
- a review of data collected on the various Fishermen's Co-operatives operating in Saskatchewan;
- an extensive interview program with key representatives of the fishermen's Co-operatives, training institutions, government departments, related stakeholders and fishers, in all over fifty (50) interviews were conducted throughout the province;
- discussion sessions with fishers, co-operative board members and the Sector Partnership Steering Committee members;
- interviews with key individuals representing Freshwater Fish Marketing Corporation;
- validation and input from members of the Steering Committee, both individually and in meetings.

Literature Review

A literature review was completed with the objective of providing the Steering Committee with background information necessary to establish a base for the human resource and training needs assessment. The information for the literature review was obtained from various sources including published and unpublished reports.

Education and Training Database

Research was conducted to develop and compile a database of education and training programs for the Saskatchewan Commercial Fishing industry. A review of existing relevant training courses were researched through the examination of institution calendars and the internet. The research focused on only those programs and courses that would apply to the freshwater fishing industry. The results show there are no programs that are directly applicable to fresh water fish, however some courses exist that are applicable or could be adapted to fresh water fish. This confirms the need to become more involved in new course development.

Key Findings

The following summarizes the key findings from the research and consultations that have taken place over the course of the study of the Human Resource and Training Needs of the Commercial Fishing industry in Saskatchewan.

Workforce Profile

- The number of commercial fishers selling to FFMC over the past ten (10) years has remained relevantly stable;
- Eighty-two (82) percent of the people working in this industry are of Aboriginal ancestry;
- It is estimated that 84% of the people working are male;
- A very small percentage, approximately only 9%, of the workforce is under the age of 24 while just over 45% are 45 years of age and older; and
- Sixty-seven (67) percent of the workforce have some high school education.

Recruitment and Retention

- Employers have said it is difficult to find skilled and knowledgeable workers;
- Word of mouth and networking through family members have been the main methods of recruiting workers;
- The seasonality of the work, low wages ($5,818 per person in 1998/99) and the manual work involved were cited by employers as the three main barriers to both the recruitment and retention of employees;
- The research found that the availability of other job opportunities in other sectors that are now operating in their or near their home communities is the cause of people not wanting to enter the industry.

Training

- The industry has gone through a number of years where no training has been made available for the workers;
- There is no institutional or work-based training offered in the province;
- Every occupation or job in the industry requires some form of training and upgrading;
- On-the-job training was the most commonly selected delivery option;
- Training is recognized as a necessity if the industry is going to be revitalized.

Recommendations

The following recommendations were developed by the Commercial Fishing Industry Sector Partnership Steering Committee based on the results of the research, the consultation process and the experience and expertise of the members themselves. The Steering Committee will be responsible to lead and direct the implementation of these recommendations in partnership with their stakeholder representatives.

Comprehensive Training Initiative

Recommendation:

The Sector Partnership Steering Committee will work with education and training providers to develop a comprehensive training initiative to address all aspects of the industry from harvesting to shipping for processing.

Strategies

- Training fishers to take proper care of their catch from the time it leaves the water till it is delivered to the plant.
- On-the-job training of plant workers in both hand filleting and mechanized filleting machine operation for processing the fish.
- Training on-the-job of the proper grading and packing of fish by the plant workers to be export ready.
- Undertaking a comprehensive study on the type of training that is needed in order to be Hazard Analysis Critical Control Point (HACCP) compliant.
- Training regarding the requirements of inspection agency systems locally and abroad and the implementation of on-going inspection.
- Develop and deliver training on the principles of a co-operative in order to facilitate and operate well organized and well run co-operatives at the Board and membership levels.
- Deliver the training within or as close as effectively possible to the respective communities where fishers, plant workers and co-operatives reside to reduce the cost and eliminate the need to travel out of the community. Training to be delivered at a time convenient to the industry.
- Arrange and meet with the various training and employment agencies to discuss those programs which can assist the hiring of workers and enable them to make the transition in the workforce.
- Prepare and deliver business skill training for the operators, fishers and the co-operatives.
- Develop and deliver a workplace trainer course to develop local capacity in order to have good teachers or trainers to show and explain the proper way to learn the skills needed through training.

Increasing Youth Participation

Recommendation

Promote career opportunities for youth in the industry and the related areas to rejuvenate the industry.

Strategies

- Encourage youth to take classes in the sciences – biology.
- Arrange to have practicing commercial fishers (male and female) speak at career days.
- Promote career opportunities outside of direct fishing, such as Department of Fisheries and Oceans, processing/inspection occupations, bookkeeping, accounting and truck driving.
- Train and employ skilled fishers, to be teachers/mentors and use them to deliver training within their home communities or regions of the province.

- Adapt the Fresh Water Fish Marketing Corporation's Youth program to be able to deliver it in different areas of Saskatchewan to train youth.
- Utilize the younger fishers already working in the industry to attract other youth into the industry.
- Provide these young fishers with the skills and tools to do this recruitment, then use them as mentors and role models to keep the youth in the industry:
  - Training and development;
  - Promotional material, get them into schools across the north;
  - Career planning.
- Promote the co-operative principles to create effective and efficient co-operatives, who in turn can focus on developing the talents of the youth and offer employment opportunities.

Industry Image

Recommendation

The Steering Committee will work with its partners to create a positive image of the industry in order to sustain itself and to renew it with more youth entering the workforce.

Strategies

- Promote and speak about the positive things that are happening in the fishing industry in northern Saskatchewan to develop ways of getting the message out by undertaking things like:
  - Doing promos on Mississippi Broadcasting Corporation in the native languages of the north (Cree, Dene and English);
  - Interview people to get their comments on what's happening in the industry;
  - News articles in northern and Aboriginal newspapers;
  - Word of mouth is the most important method to get the message out;
  - Use the Band schools and non-Band schools to promote the industry; and
  - Inform the general public in the north through such organizations and individuals as schools, Department officials, the Elders, Senators, Band Chiefs and Councils.

Improved Communications

Recommendation

There is a need by the Steering Committee to improve communications by using the Sector Partnership to approach and address the issues found in this study.

Strategies

- Develop strategies to "work together";
- Work with agencies and organizations such as the Department of Fisheries and Oceans (DFO), Saskatchewan Environment and Resource Management (SERM), Saskatchewan Northern Affairs (SNA), Freshwater Fish Marketing Corporation (FFMC) and Canadian Food Inspection Agency (CFIA) to examine career opportunities for employment in other related occupations in the industry;
- Explore the co-op training model as a way to approach training;

- Share the results of the study with the representative stakeholder organizations and agencies.

Economic Viability of the Industry

Recommendation

The Steering Committee along with the industry need to work together to exchange ideas and implement ways for increasing revenue potential. The focus should be on those areas, such as quality and quantity as this is where they have control. This will require working with FFMC, training providers and government to implement those initiatives that will lead to increasing potential earning power of those working in the industry.

Strategies

- There are certain areas the fishers and co-operatives through the following activities can increase their revenues and thus the economic viability of the industry:
  - Upgrading the skill levels of the people in the industry;
  - Learning new technologies;
  - Youth coming into the industry with a good set of employment and essential skills;
  - Providing a good quality product that's ready for processing;
  - Work with FFMC to study the feasibility of establishing processing capabilities in the province which will increase revenue and value-added products that could go directly to market or on to FFMC in Winnipeg; this will create a need for further training in such areas as:
    - Feasibility studies;
    - Business planning and financing;
    - Technical skill development in processing;
    - Knowledge of processing;
    - Marketing and sales opportunities.
  - Develop the necessary training options that will be required for the processing plant operations.

Resource Management

Recommendation

The Steering Committee along with the SCFCFL work together with organizations like SNA, SERM, DFO and FFMC to assist the industry to be managers of their own resource.

Strategies

- Use the expertise available to:
  - Protect fish habitat;
  - Work together with a common purpose;
  - Learn roles and use the expertise of the organizations;
  - Educate and inform the governments and the public on what's happening in and on the lakes fished;
  - Share information to make it better over for everyone;

- Recognize the knowledge of the people in the industry, because they have a wealth of knowledge and experience;
- Train the public and the community leaders;
- Work to make the change for the better over the long term in order to sustain and expand the industry.

Next Steps

Over the coming months the Steering Committee in co-operation with key stakeholders will call an meeting to discuss the next steps required to implement the recommendations and organize to undertake the following:

- Develop an effective northern/southern user-friendly communication strategy to ensure the distribution of the study and the results are effectively communicated to all the relevant stakeholders.
- Arrange meetings with the education and training providers to prioritize and implement the relevant training needed for all facets of the industry.
- Explore avenues for potential funding and accessing available resources of and through the partners for on-going sustainability of the Sector Partnership.
- Undertake a review of the existing Steering Committee structure and membership to determine whether additional members are needed and who they may be.
- Prioritize the recommendations and strategies.
- Examine the various programs which are available for employers and the sector that will aid the hiring of new employees and prepare them to make the transition into the commercial fishing industry.

TABLE OF CONTENTS

ACKNOWLEDGEMENTS I

STEERING COMMITTEE II

INDUSTRY REPRESENTATIVES II

ABORIGINAL ORGANIZATIONAL MEMBERSHIP 2

TRAINING PROVIDER MEMBERS III

GOVERNMENT REPRESENTATIVES 3

EXECUTIVE SUMMARY IV

INTRODUCTION IV

METHODOLOGY V

LITERATURE REVIEW V

EDUCATION AND TRAINING DATABASE V

KEY FINDINGS V

RECOMMENDATIONS VI

Comprehensive Training Initiative vii
Increasing Youth Participation vii
Industry Image viii
Improved Communications viii
Economic Viability of the Industry ix
Resource Management ix

NEXT STEPS X

1.0 INTRODUCTION 5

1.1 Background 5
1.2 Objectives 6
1.3 Methodology 6

2.0 BACKGROUND RESEARCH 8

2.1 Introduction 8
2.2 History of the Commercial Fishing Industry in Northern Saskatchewan 8
2.3 Adult Education and Co-operative Development 11
2.3.1 Types of Education *12*
2.3.2 Effectiveness of Education *12*
2.3.3 Educational Purposes and Philosophy *12*
2.4 Current Status of the Commercial Fishing in Northern Saskatchewan 13

2.5 A Study for Northern Affairs 14
2.6 Workforce Profile 15
2.7 Conclusion 15

3.0 TRAINING DATABASE 17

4.0 NEEDS ASSESSMENT SURVEY 18

4.1 Size and Growth of the Industry 18
4.2 Major Segments of the Commercial Fishing Industry 18
4.2.1 Northern Commercial Fisheries Co-operatives 19
4.2.2 Northern Saskatchewan Fisheries Infrastructure Program 20
4.2.3 Commercial Fishers and Helpers 21
4.2.4 Packing Plant Operations 21
4.2.5 Fish Processors (Special Dealer Licenses) 21
4.2.6 Freshwater Fish Marketing Corporation (FFMC) Agents 22
4.3 Sectoral Profile 23

5.0 EMPLOYMENT IN THE COMMERCIAL FISHING INDUSTRY 24

5.1 Characteristics of Employment 24
5.2 Demographics 24
5.2.1 What percentage of the people working in the industry are Aboriginal? 24
5.2.2 How many people are estimated to be working in the industry? 25
5.2.3 What is the gender profile of the commercial fishing industry? 25
5.2.4 Estimate the age of people working in the commercial fishing industry. 26
5.2.5 Estimate the education levels of the people working in the industry. 26

6.0 RECRUITMENT & RETENTION 27

6.1 What barriers, if any do potential employees face when working in the industry? 27
6.2 What barriers do employers face in recruiting and retaining employees? 27
6.3 Do you consider turnover in the commercial fishing industry to be a problem? 27
6.4 What is the most common method of recruitment used in the industry? 28

7.0 TRAINING 29

7.1 What skills do people employed in the commercial fishing industry require? 29
7.1.1 Commercial Fishers 30
7.1.2 Helpers 31
7.1.3 Packing Plant Workers 31
7.1.4 Co-operative Boards 31
7.2 What training programs for the commercial fishing industry are available in the province? 31
7.2.1 Freshwater Fish Marketing Corporation Pilot Training Project (Youth Program) 32
7.2.2 Identify those training areas that need to be addressed. 32
7.2.3 The commonly identified areas in need of training and updating. 33
7.3 What are some of the difficulties encountered in achieving training objectives? 34
7.4 What would be the most effective way to deliver training? 35
7.5 What are the training needs facing the industry? 36

8.0 OTHER ISSUES 37

8.1 What are some of the forces effecting change on the industry? 37
8.2 What do you see as needed when coping with technology? 38
8.3 What are some of the factors influencing growth? 38
8.4 What do you see as areas that are impacting the industry? 38

9.0 CONCLUSIONS 40

10.0 KEY FINDINGS 43

11.0 RECOMMENDATIONS 44

11.1 Comprehensive Training Initiative 44
11.2 Increased Youth Participation 44
11.3 Industry Image 45
11.4 Improved Communications 45
11.5 Economic Viability of the Industry 46
11.6 Resource Management 46

12.0 NEXT STEPS 48

APPENDIX A: EDUCATION AND TRAINING DATABASE 49

FIGURES

Figure 1: Recruitment Methods 28
Figure 2: Forces Effecting Change 37
Figure 3: Factors Impacting the Industry 39

TABLES

Table 1: Labour Force 15 Years and Over by Industry Division, 1996 Census 15
Table 2: Co-operatives 19
Table 3: Total Employment in Commercial Fishing 24
Table 4: Current and Projected Employment Numbers 25
Table 5: Gender Profile of People in the Commercial Fishing Industry 26
Table 6: Age of People Working in the Commercial Fishing Industry 26
Table 7: Education Levels 26

1.0 Introduction

1.1 *Background*

The commercial fishing industry is a vital part of the Northern economy of Saskatchewan. It is estimated that the direct value of the industry in Saskatchewan is 5.2 million dollars. This industry represents a major contribution to the economy of northern communities where high unemployment results in social and economic hardship to the residents. There are 35 communities in the north where commercial fishers reside and whose primary source of income is from commercial fishing. In many of these communities this is the largest and sometimes the only sector outside of the public service where people are employed.

The industry has a long history in the province and at one time contributed greatly to the economy. For many reasons, including: less localized processing plants; changes in demand for fish by consumers and prices paid to fishermen; to name a few, there has been a steady decline, to a point that today the industry is in threat of disappearing. A recent major economic development study which examined the commercial fishing industry in Saskatchewan revealed that by overcoming a number of barriers there is a significant opportunity to increase production and to undertake processing operations particularly for the underutilized species in our lakes and rivers.

As a result of these opportunities and the past difficulties the Saskatchewan Commercial Fishermen's Co-operative Federation Limited (SCFCFL) approached Trimension Training & Consulting Group Inc. and Spruce River Research to develop and submit a concept proposal to Saskatchewan Post-Secondary Education and Skills Training Sector Partnership Program to sponsor a study of the human resource and training needs of the commercial fishing industry in Saskatchewan.

The industry has, over the past number of years, had difficulty with a skill shortage of adequately trained fishers, helpers, packing plant workers and process workers, along with limited support for developing and enhancing the twenty-nine (29) fishermen's co-operatives and one (1) association operating in the province. Human resource development and upgrading, particularly for the fishers, is critical for the industry's longer term development and expansion.

The SCFCFL recognizes that it has to assume a greater responsibility to its member co-operatives and their members for training and human resource decisions to the industry and other stakeholders who are closest to the labour market.

The SCFCFL believes it will benefit by taking responsibility for identifying and addressing its own human resource and training needs. They, along with their partners such as Freshwater Fish Marketing Corporation (FFMC), Saskatchewan Northern Affairs (SNA) and Saskatchewan Environment and Resource Management (SERM), can work with and improve the training system for the benefit of existing and prospective employers and employees.

This study was initiated on behalf of the Commercial Fishing Industry Sector Partnership which views the human resource and training needs of its fishers and employees as critical for the sustainability and growth of the industry in Saskatchewan. This study was sponsored by the Saskatchewan Post-Secondary Education and Skills Training Sector Partnerships Program.

1.2 *Objectives*

The objectives were to examine the nature and scope of the human resource issues in the commercial fishing industry and to recommend appropriate strategies for action with respect to those issues identified. The analysis included:

- an analysis of the sector's human resource capacity issues;
- identifying current and future human resource needs and develop strategies to address those needs;
- identifying current and future training needs for existing and new employees and develop appropriate strategies to address those needs;
- developing a training database of relevant programs and courses including the training provider, and accreditation levels;
- developing new and innovative approaches to the delivery of training;
- developing effective partnerships between the industry, its stakeholders and education and training providers that will be sustainable.

The stakeholder groups who represent the commercial fishing industry, for the purposes of this study, were identified as fishermen's co-operatives, fishers and helpers, packing plant and processing plant workers. The study addresses the human resource and training needs associated with catching, packing and the small processing plants located in close proximity to the various lakesides.

The overall goal of the study was to continue the momentum created with the economic study of the industry and an implementation mechanism to allow the industry to address its human resource needs on an ongoing basis.

1.3 *Methodology*

This report addresses the human resources and training needs of the commercial fishing industry of Saskatchewan. It summarizes the major findings from research undertaken and the recommendations developed by the Sector Partnership Steering Committee.

The methodology included a research program throughout the industry:

- a documentation/literature review of relevant previous studies and reports;
- a review of data collected on the various Fishermen's Co-operatives operating in Saskatchewan;
- an extensive interview program with key representatives of the fishermen's Co-operatives, training institutions, government departments, related stakeholders and fishers, in all over 50 interviews were conducted throughout the province;

- discussion sessions with fishers, co-operative board members and the Sector Partnership Steering Committee members; and
- interviews with key individuals representing Freshwater Fish Marketing Corporation (FFMC).

2.0 Background Research

2.1 *Introduction*

The interviews with the industry stakeholders were conducted by the project team members of both Trimension Group and Spruce River Research. Trimension Group compiled the background research, facilitated the Steering Committee meetings, summarized and analyzed the data gathered from the interviews and wrote the final report. The recommendations of the major economic development study recently completed for the Department of Northern Affairs, if fully implemented, could form the basis of growth in the commercial fish industry in both primary production and processing. The commercial fishery in Saskatchewan has lost fish processing plants and training initiatives over the last twenty years creating a situation in which current human resources and training are not capable of meeting expected growth. This literature review examines the history of the commercial fishery, its current status and future growth. It also provides information on the current workforce, the reliance of northern communities on the fishery and the important role of Aboriginal peoples in the industry.

2.2 *History of the Commercial Fishing Industry in Northern Saskatchewan*[1]

Commercial fishing has a long history in Saskatchewan. As early as 1885 the Qu'Appelle lakes had a whitefish fishery and in the 1920's Dore, Montreal, and Lac la Ronge were fished in the winter. The roots of modern commercial fishing lie in the sale of fish to the early fur traders.

The northern fishery was largely made up of Aboriginal fishermen with long family traditions with fishing until large fishing companies undertook for-profit fishing in the early 1900s. A large part of the Aboriginal oral history and traditional territory was built around the location of fish camps and the catching of fish for winter storage. Gradually the commercial fishing industry, especially in the north, has come to be associated with people who live close to the resource and who place the most value on its conservation because of cost associated with travel and living, along with income potential declining.

Saskatchewan commercial fishing up until the late 1940's was primarily a winter industry. The fish were caught in gill nets placed beneath the ice and hauled to railhead on sleighs drawn by tractors, horses, bombardiers, or dog teams. Similar to today's situation, transportation was the chief difficulty in marketing fish. The hauls were usually long and maintaining fish quality was an issue. If the fish were to be shipped fresh they must not freeze, and if shipped frozen must not thaw, as in either case there would be spoilage.

The establishment of fish filleting plants and the introduction of portable quick freezing units in the late 1940's led to a switch to a summer fishery and by 1959 the summer fishing season accounted for nearly 75% of all commercial fish caught.

[1] Unless otherwise noted this information is from an "Examination of the Commercial Fish Industry in Saskatchewan," Office of Northern Affairs and Trimension Group, 1999.

This trend has moderated somewhat over the years and according to the latest quarterly reports which are released by Freshwater Fish Marketing Corporation, reveals the summer season (May – October) accounts for 56% of the commercial fish caught and 44% for the winter season (November – April).[2]

There are several factors that have contributed to these seasonal changes:

1. The requirement to transport fish to Winnipeg and assemble loads on a regional basis. The communities/lakes from Pinehouse to the west are primarily winter operations. La Ronge is both seasons, neither of which is very buoyant and Denare Beach receives some during the winter.
2. A larger factor in the decision to fish only one reason relates to Employment Insurance (EI) benefits. Fishers qualify for EI in one season and are eligible to draw benefits in the next season.
3. The Canadian Food Inspection Agency (CFIA) has decreed that fish may not be frozen on the lake and must be delivered to the packing/processing facility in a 'fresh' that is unfrozen state. This has eliminated the production from many remote lakes that were traditionally producing in the winter season. Fishers are adapting and if prices for the production warrant the extra effort, many will find ways to bring fish from the more remote areas in winter weather.
4. There has often been a linkage between trapping and fishing and the decline of fur prices has contributed to some reduction in winter activity.
5. Lake Athabasca, which was always a large 'summer' production is no longer producing any significant volume and this would also shift the percentage. Reindeer Lake and Wollaston are somewhat smaller except they produce in the summer and find it unprofitable to produce in winter under current 'species limits' on lakes and the low prices for 'cutter' Whitefish.

With the advancement in the aviation industry, the use of airplanes made shipments from the lakes to railheads in Prince Albert, Lynn Lake, Flin Flon, Meadow Lake, and Big River more accessible. Barges were used to transport fish from Lake Athabasca to Fort MacMurray. The fish were then reshipped and sold in Saskatchewan cities and in the rest of Canada or the United States.

The commercial fishermen and fur farmers had an interdependent relationship whereby fur farmers bought rough fish for feed and fishermen had an outlet for rough fish. Fur farmers also fished for themselves. Similarly, fishermen relied on hunting and trapping in the winter months to supplement their livelihood.

By 1959 the provincial government was actively encouraging co-operative development among northern residents and was specifically targeting the commercial fishing industry. The result was the formation of the Cooperative Fisheries Limited (CFL). The formation of the CFL was in part recognition by government that the industry needed a formal structure to communicate technology change, business practices, and other educational transfers to the commercial

[2] Freshwater Fish Marketing Corporation – 2000/2001 Quarterly Reports.

fishermen. This structure would also be a method for the Department of Natural Resources, Fisheries Branch, to receive feedback from fishermen and information on lakes and species problems.

The CFL operated processing facilities at Wollaston, Deschambault, Pinehouse, Pelican Narrows, Amisk Lake, Kinosao, La Ronge, Prince Albert and the Pas, Manitoba until 1969. It acted as a 'single sales desk' marketing agent and during its tenure returned profits for its members, pooled returns, returned dividends, and accumulated equity in its assets. During this time, the Department of Natural Resources (DNR) regularly received feedback from fishermen about information on the lakes and any species problems, which effectively provided essential data on resource management. Many believe that if this model were used today, the existing relationship between SERM (which now plays the role DNR did back then) and the SCFCFL (which is now what the CFL was) would be greatly improved. Communication and consultation were the key ingredients to that success.

Right from the beginning, the CFL made a conscious decision to place a real priority on the development of the people working in the industry through education. The CFL established an education and training committee and a close relationship was developed with the Western Co-operative College. The Annual General Meetings (AGM) served as the primary forum in the development of the co-operation and the delegates who attended these meetings. These AGMs were well organized and provided ample time for learning to take place. This model was often used at the local levels, where similar organizations were set up which then encouraged communication and learning in the home communities.

The CFL enjoyed success as evidenced by the growth of cooperatives, the development of its members through education, training and learning by doing, and marketing of fish. However, due to various factors beyond the control of local fisherman, the Freshwater Fish Marketing Corporation (FFMC) was established by the federal government in 1969. FFMC was established as a federal crown corporation required to market all commercial fish caught in inland waters. Up until the advent of FFMC, the CFL had processed and marketed Saskatchewan fish both domestically and internationally. Since its establishment the FFMC has never enjoyed amicable relations with local fisherman. The establishment of the FFMC also saw the centralization of fish processing in Winnipeg, resulting in the closures of about 12 plants in northern Saskatchewan. These closures left 180 people out of work, half of whom were women. Right from the commencement of FFMC, fisherman have indicated a desire for the ability to independently market their product and various studies and recommendations have been made to move in that direction, as well as to improve FFMC and fisher relations. The discussions have gone on from the start and are continuing at the present time.

The CFL struggled to continue, but because they had no control over both the processing and marketing of the commercial fish caught, it experienced serious financial problems. By the spring of 1978, the CFL was deep in debt and it entered into an agreement with the FFMC to take over management of the processing facilities it owned. Finally, in May, 1980, the dissolution of the CFL was approved at a delegates meeting in La Ronge.

The CFL was officially dissolved in 1981 and the members decided to use their share capital to set up the Saskatchewan Commercial Fishermen's Co-operatives Federation Ltd. (SCFCFL). The SCFCFL has been kept active over the years, first as a lobby group and now more recently as an organization representative of the industry to address the future economic viability through development and growth.

2.3 *Adult Education and Co-operative Development*

In his research paper "Co-operative Fisheries Limited: A Northern Saskatchewan Story", Daniel Beveridge defines a co-operative as follows:

> "A co-operative ... is a form of adult education expressed in an enterprise."[3]

He goes on to say that "Education was a major responsibility of the Extension Services Branch of the Department of Co-operation and Co-operative Development (DCCD) with reference to different types of audiences.

> **Communities:** There is a great lack of leadership as well as organizational and operational ability in northern communities. Representatives of the branch become involved in many types of activities ... These include recreational clubs, community organizations, etc. However, this does not afford an opportunity to assist with the general education of northern people ...
>
> **Members of Co-operatives:** General and special meetings are held to inform the people on what is happening and to arrive at important decisions. One or more co-operative schools are being planned under the sponsorship of the Co-operative Union of Saskatchewan for members of northern co-operatives.
>
> **Boards of Directors:** Every effort is being made to have regular board meetings.... In the case of ... Co-operative Fisheries Limited where the major management decisions are made by central boards, there is an additional problem of keeping the local boards interested and involved.
>
> **Managers:** ...Traditionally non-aboriginal people have taken over leadership roles and have provided all of the business knowledge in the economy. It seems important that native people be given the opportunity to take over leadership and business roles in their own communities. This implies that sufficient support is provided so that they are able to fulfill the role in a reasonably successful manner."[4]

[3] Fairbairn et al, 1991, p. 35 - Daniel M. Beveridge
[4] DCCD, 1960, p. 94 - Daniel M. Beveridge

2.3.1 Types of Education

Beveridge's study reveals that the major types of education used by Co-operative Fisheries Limited (CFL) used to include:

- The annual general meeting of CFL, where education was an integral aspect of the conduct of the meeting;
- Annual general meetings for local fishermen's co-operatives;
- Training workshops for local co-operative leaders in a settlement;
- Participation of elected directors and associate directors in meetings of the central board of CFL;
- Participation of delegates, directors, management and staff of CFL, and government field staff, in appropriate course at the Western Co-operative College in Saskatoon (these included Co-operative Information courses, Co-operative Management courses, and others, each normally five days in length).

2.3.2 Effectiveness of Education

The report from the CFL determined that the three-day annual meetings, the courses, and government management advisors provided opportunities for valuable and effective training and learning to take place. These methods were used to set up organizations at the local level. These educational activities were very useful. This process at the time was seen as the most effective way of brining the fishers and government together.

2.3.3 Educational Purposes and Philosophy

The educational activities had a practical emphasis and focused on the immediate needs of CFL and other northern co-operatives. Educational activities conducted would reflect the influence of the College. In College methodology there was a strong emphasis on the process of adult learning, a process in which the learner was involved actively, often in small group discussion, as opposed to an exclusive emphasis on content and information transfer.

Mr. Harold Chapman, who was the Principal of the College in Saskatoon at the time had adult education experience which included working with the Saskatchewan Royal Commission on Agriculture and Rural Life in the 1950s. He developed a mini-theory of adult education, which he organized into the following Principles of Adult Learning:

- Problems need to be considered important to those expected to solve them.
- Start where people are -- not where we think they are or would like them to be.
- A person cannot transfer his knowledge and skills to another -- the other must go through a learning process.
- Significant learning takes place when facts and information are integrated [or hooked] into the experience of the learner.
- A person feels more responsible for that which he helps to create. (MacPherson, 1987, pp. 177-178)

College courses in various areas -- co-operative information, co-operative management, credit union management, co-operative leadership, and co-operative education -- attempted to express those principles of adult learning.

Co-operative historian Ian MacPherson (1987) claims there was a subtle but vital difference between this educational technique with its focus on group process developed by the College and those favored by earlier co-op educators and activists.

In his document, Beveridge maintains there was a strong belief at the College that co-operatives were an expression of economic democracy and, as such, could better meet human needs in a capitalist society than other types of business.

The relationship between the Western Co-operative College and the Co-operative Fisheries Limited (CFL) remained strong throughout the 1960's. However, because there was less emphasis to support training and development of the co-operative movement in the north by the government of the day, the CFL began to rely less and less on the support from the College. At the same time, the College was refocusing and directing its priorities into other regions, particularly in northern Alberta and the Northwest Territories. The research indicates there was no deliberate decision to cease working together, but by late 1969 and early 1970 the CFL required very little programming and services from the College after that time.

2.4 *Current Status of the Commercial Fishing in Northern Saskatchewan*

Commercial fishing is a vital part of the Northern economy. Gross sales in 1998 were over $4 million, down from a high of nearly $7 million. This represents a major contribution to the northern economy where high unemployment rates result in social and economic hardship and increased need for government assistance. There are approximately 35 communities spread across the north where commercial fishers live and in which income from commercial fishing is a prime source of income. In many communities this is the largest and sometimes only sector outside of public service where people can expect employment.[5]

The commercial fishing industry in Saskatchewan during the 1960's and 1970's was flourishing with over 500 lakes and rivers[6] being fished. Since that era, there has been a steady decline where today about 50 lakes are being actively fished. This is due to cost of fishing versus income, lack of fish processing facilities in the province and changes in legislation and regulations on fish processing and marketing. With this decline, today it is estimated to be approximately 540 licensed commercial fishers operating in the province who are selling to FFMC. Each commercial fisher must purchase a separate license for each lake they expect to fish upon, thus it makes it difficult to pinpoint the exact numbers of commercial fishers operating in Saskatchewan. The research shows there are over 1200 commercial fishing licenses issued each year.

[5] "Sector Partnership Commercial Fishing Industry Concept Proposal," Spruce River Research and Trimension Group, November 1999.
[6] Examination of the Commercial Fish Industry in Saskatchewan," Office of Northern Affairs and Trimension Group, 1999.

As a result of the study released in January, 2000, the provincial government under the Department of Saskatchewan Environment and Resource Management announced they are committed to facilitating the doubling of the annual catch from around four million pounds to over eight million pounds. The reason being there are presently many quotas not being utilized and there is going to be an increased emphasis on the underutilized species of fish which exist in the lake, such as burbot and mullet.

This announced increase will definitely have some bearing on increasing the number of new commercial fishers operating, however, this opportunity will also provide longer employment time and greater potential for increased income for the already existing 540 plus fishers and the helpers they already employ.

In addition to direct employment by fisherman, a secondary industry exists to service the commercial fishery. There are approximately twelve fish packing agents who operate under license from the FFMC. These packing plants are operated by private agents or fishermen's co-ops and are responsible for separating the fish by species, packing them in ice and shipping them to Winnipeg for processing. Two trucking companies are the primary haulers of commercial fish. Special dealers who hold licenses to sell fish within Saskatchewan are responsible for between 8% and 15% of commercial fish sales. Last but not least there are inventory suppliers servicing the fishery.

As outlined in the prior section, the commercial fishing industry has a long history of cooperative development. At present fishermen are organized in 29 co-operatives and 1 association under the umbrella organization known as the Saskatchewan Commercial Fishermen Co-operative Federation Limited (SCFCFL). Fishermen sell their catch to FFMC unless under the provision of a special dealer license which allows their catch to be sold to customers within Saskatchewan.

2.5 *A Study for Northern Affairs*

The recent study completed for Saskatchewan Northern Affairs that was released in January, 2000, examined the current status of the fishing industry and made recommendations for future change. Those recommendations, if adopted, would result in steps being taken to expand the industry and return it to local control. Among the recommendations is one to establish a fresh fish processing plant in Saskatchewan. Marketing efforts for Saskatchewan fish would then originate from the province and be carried out by Saskatchewan people. With increased efforts to process fish in and market fish from Saskatchewan, increased efforts would also have to be taken to sustainably harvest more fish from Saskatchewan lakes. At present only about one half of the available quota is being caught and marketed.

In order to support this growth, sufficient and capable people with the appropriate skills will be needed in such areas as processing, marketing, and management skills. Training will be needed in co-operative development, business, resource management, and new technologies and techniques.[7]

[7] Examination of the Commercial Fish Industry in Saskatchewan," Office of Northern Affairs and Trimension Group, 1999.

2.6 *Workforce Profile*

While the fishery in northern Saskatchewan is often quoted as having over 500 fishermen, only 220 people in the employed labour force classified themselves as part of the Fishing, Hunting and Trapping industry in the 1996 Census. Data from Statistics Canada on the exact number of fisherman in Saskatchewan is unavailable, however, 1999 data from FFMC indicate there are 540 fishermen in Saskatchewan selling to them. Statistics Canada data is presented below.

Table 1: Labour Force 15 Years and Over by Industry Division, 1996 Census

	Canada	SK	MB	AB	NWT
All Industries	14,317,545	**493,430**	553,875	1,461,360	30,660
Fishing & Trapping Industries	45,695	**220**	1,010	370	285

Source: Statistics Canada

The following table compares number of fisherman, weight delivered and value of product by initial payment. This information is from FFMC and sheds a clearer light on the number of fishermen in Saskatchewan.

	1990/91			1998/99		
Province	# of Fishers	Delivered Weight (Kg)	$ Value (Initial Pymt)	# of Fishers	Delivered Weight (Kg)	$ Value (Initial Pymt)
Manitoba	1,778	7,650,632	$11,085,564	1,723	9,376,450	$18,717,332
Saskatchewan	**529**	**2,093,612**	**$2,018,919**	**540**	**2,519,666**	**$3,683,262**
Alberta	282	1,305,430	$1,232,393	172	1,356,823	$1,791,910
NW Territories	96	1,414,948	$1,521,081	73	1,043,533	$1,250,706
NW Ontario	5	7,854	$12,566	2	4,292	$9,500
Total FFMC	**2,690**	**12,472,476**	**$15,870,523**	**2,510**	**14,300,764**	**$25,452,710**

Information from Revenue Canada indicates the commercial fishers reported an average net income as $5,818 per person in 1998/99. With the fact that commercial fishing is not always the main occupation reported, therefore these may be income received from other work they undertake during the other seasons, such as trapping.[8]

2.7 *Conclusion*

Commercial fishing is an integral part of the Northern economy. It is the significant component of the industry that includes trapping and hunting. Over 85% of commercial fishers are Aboriginal and fishing is part of their historical experience and cultural well-being. Over the last 50 years, first the provincial then the federal governments have been involved in the development of the fishery. The province initiated a co-operative system in the 1950s that was to become the basis for municipal government in the north. The co-operatives initiated training in co-operative development, business and public administration among its members. In the late 1960s the federal government instituted the Freshwater Fish Marketing Corporation to act as a single-desk marketing board for freshwater fishing in Canada. The FFMC has never been fully accepted by local Saskatchewan fishermen and engenders a certain amount of hostility even today.

[8] "Examination of the Commercial Fish Industry in Saskatchewan," Office of Northern Affairs and Trimension Group, 1999.

The long-term difficulties and relationship with FFMC have helped spur initiatives to study the expansion of the commercial fishing industry and return control over processing and marketing back to the Saskatchewan industry. The latest of these studies suggests a cooperative approach with the FFMC and suggests the feasibility of a processing plant in Saskatchewan be reexamined. A shift to more local processing and the continued development of the northern fishery would place increased pressure on skill sets already in short supply. As there is no formal training in Saskatchewan dedicated to the fishery, an assessment of human resource and training needs is vital to the success of the industry.

3.0 Training Database

A review of existing relevant training courses were researched through the examination of institution calendars and the internet. The research focused on only those programs and courses that would apply to the freshwater fishing industry. The results show there is little relevant programs and courses in the province which are directly applicable to the education and training needs of the industry. This confirms the need of the industry to become more involved in new course development and delivery of training.

The existing education and training database can be found in Appendix A of this report.

4.0 Needs Assessment Survey

Gaining a strong understanding of the human resource and training issues and needs of the commercial fishing industry was obtained through a series of meetings and interviews with commercial fishers, board members of the various co-operatives, packing plant workers, fish processing operators, and agents for FFMC.

Input was also sought from individuals who have long been associated with the commercial fishing industry and were able to provide insight and background on the industry itself. In all, a total of fifty (50) interviews were completed. In many cases, the person interviewed was able to speak with authority and knowledge on behalf of representative groups like co-operatives, and could relate beyond their own person viewpoints.

The following are the details of those interviews and the analysis stemming from the information.

4.1 *Size and Growth of the Industry*

The commercial fishing industry is important to Saskatchewan, primarily northern Saskatchewan, not so much for its economic contribution to the economy, but rather the industry being a cornerstone for employment and income for residents in many communities in northern Saskatchewan. In some, commercial fishing is the primary industry and sole income provider for families. The total direct value of the industry in Saskatchewan is 5.2 million dollars, which, as indicated earlier, is mainly in remote northern communities where there are limited employment opportunities. The breakdown of this amount is based on payments to commercial fishers of 4 million dollars, payments to FFMC agents of $700,000 and to freight companies in the amount of $500,000.

Research indicates there is a considerable amount of unused commercial quota available, particularly for whitefish as well as a significant supply of underutilized species. An increase in harvesting can be achieved by using different technology such as global positioning systems and computers, better business planning and additional processing opportunities can be undertaken, especially with the underutilized species. In order for the industry to implement these options and make improvements in the commercial fishing industry, it will be necessary for the industry to organize itself to address its human resource, develop training and address other operational issues.

4.2 *Major Segments of the Commercial Fishing Industry*

The commercial fishing industry in Saskatchewan is not very large in comparison to the other major economic growth sectors, but it can be classified as fairly well organized which is attributed to the operating co-operatives and the Saskatchewan Commercial Fishermen's Co-operative Federation Limited (SCFCFL). Production is dispersed geographically and the primary cash species sold are whitefish, walleye, northern pike, lake trout and mullet.

For the purposes of this study, commercial fishing includes the following segments. Information was gathered through interviews with people working in each of the segments and people knowledgeable about each segment.

4.2.1 Northern Commercial Fisheries Co-operatives

The findings from the interviews with the SCFCFL and the co-operatives show there are currently approximately twenty-nine (29) northern commercial fisheries Co-operatives and one (1) Association operating in some capacity in northern Saskatchewan. From this review the following chart summarizes the status of the co-operatives:

Table 2: Co-operatives

Co-operative Status/Category	Number
Current Co-operatives	21
Fishing Associations	0
Developmental Co-operatives	4
Co-operatives Active but not Current	2
Co-operatives not Current and not Active	2
Regional Associations	1
TOTAL	30

Current Co-operatives – A co-operative that is incorporated and has maintained their registration by submitting an annual return to the Registrar. On that basis they can legally conduct business as a co-operative.

Association – There is only one group under this category. They conduct business in that name although may not be legally registered. Are in the process of applying for incorporation as a co-operative.

Developmental – Studying the process of incorporation as a legal entity or in the process of development of bylaws and in the process of becoming legally registered.

Active but not Current – Co-operatives that have been incorporated but have not maintained their registration and have been 'struck' from the registry.

Regional Association – Co-operatives may be known as 'associations', however, this refers to a 'Federation' of fisher's co-operatives and is a co-operative structure.

From the member co-operatives in good standing, representatives are elected at the SCFCFL Annual General Meeting to sit on that Board. The SCFCFL is the umbrella organization, which represents and speaks on behalf of the commercial fishers and has a nine member board.

There are approximately 540 commercial fishers who are members of the various commercial fisheries co-operatives in the north who presently sell their catch to FFMC.

Each co-operative that is presently operating or in some stage of development requires a board of directors made up of volunteer members from the fishing community. Each co-operative will be

required to have someone designated as the manager. Many, because of their financial situation will not be in a position to hire a paid employee. With this being the situation, these co-operatives have indicated a need for training and support for them to develop and operate effectively. This means there will be need for Board of Director training on how to be a board member and understand their roles and responsibilities. There will also be a need for training on how to facilitate board meetings, record minutes, report writing, reporting and record keeping, both financial and operational.

4.2.2 Northern Saskatchewan Fisheries Infrastructure Program

During the course of conducting the interviews with the industry stakeholders, the Northern Saskatchewan Fisheries Infrastructure Program was announced in September of 2000. This program is funded by the Government of Saskatchewan Centenary Fund in support of the commercial fishing industry revitalization strategy. This strategy was developed as a result of the study completed and released in January, 2000, for Saskatchewan Northern Affairs.

The details of the Program were provided by Saskatchewan Northern Affairs and intended to help improve lakeside facilities for the commercial fishing industry with the Northern Administration District (NAD).

The Centenary Fund has contributed $700,000.00 in 2000-2001 toward improving lakeside facilities in support of harvesting, packing and shipping of fish from northern lakes to provincial, national and international markets.

The Northern Saskatchewan Fisheries Infrastructure Program implementation plan has been developed jointly by the Saskatchewan Commercial Fishermen's Co-operative Federation Limited and Saskatchewan Northern Affairs. The program will make grants of up to $50,000.00 for individual facility projects to the SCFCFL on behalf of the individual proponents for approved projects.

Support will be provided to help maintain the delivery of high-quality fish to markets, increase use of underutilized species and fish stocks, and enhance the value of the commercial fishery to fishers and the provincial economy. Such projects may include new capital construction, major repairs and upgrades of existing facilities and/or introduction of new/replacement equipment not held personally by individual fishers.

Eligible projects may generally include initiatives that:

- Enhance the utilization of underutilized species and production from lakes that are not producing the limits for gazetted species of fish.
- Will enhance the value of the fishery to the community through the utilization of portions of the harvested fish not currently assembled and marketed.
- Provide equipment for the improvement of the business operations of a fisher-owned organization or a group of fisher organizations.
- Will improve the viability of the fishery and maintain a high quality product for market.

- Demonstrate the required level of equity contribution by the fishers who will utilize and benefit from the project.[9]

4.2.3 Commercial Fishers and Helpers

In conducting the interviews with the commercial fishers and helpers it was found that commercial fishers and helpers make up the largest portion of the labour force employed in the industry. The discussions with FFMC revealed there are approximately 540 active commercial fishers and over 1,000 helpers working on over 250 commercial fished lakes that are located mainly in northern Saskatchewan who sell their product to them. It is estimated that over 90% of the 2,519,666 kilograms of fish caught in 1998/99 are from 50 major lakes. The fishers and helpers predominately winter fish, although there are a number of lakes that summer fish and very few do both winter and summer fishing. This creates a very seasonal work pattern for those employed in the industry. Quite often this work pattern or cycle includes another occupation or job and may include hunting and trapping or working as a guide for an outfitter. Over 85% of the commercial fishers and helpers are Aboriginal and fishing is a part of historical experience and cultural well being.

4.2.4 Packing Plant Operations

During the course of the initial research, the literature revealed that at one time there were a large number of remote packing and processing plants located throughout the northern part of the province. These plants used to handle products for FFMC, but have been closed over time to where now the processing of fish has been centralized to the FFMC plant in Transcona near Winnipeg, Manitoba.

In the interviews with the present packing plant operators, they indicated that today there are 15 packing stations located in various locations throughout the northern region of the province. These stations are operated by commercial fishing co-operatives, or private entrepreneurs and they act as agents for FFMC. These stations act as collection points or depots where the fish are delivered to by the commercial fishers. At these stations, the fish are weighed, graded by species and size, packed in ice and readied for shipment to Winnipeg by truck.

The packing plant operators stated there is a real need for infrastructure improvements to these packing plants, as some are very old and many do not have ice making capabilities. There haven't been any major improvements done to the existing packing plants for over 10 years, although recently a new one was built by Peter Ballantyne Cree Nation at Deschambault Lake. Most plants have limited capacity and are in need of repair.

4.2.5 Fish Processors (Special Dealer Licenses)

The research found there are five Special Fish Dealers, referred to as Fish Processors, operating in the province. In the interviews with these fish processors, it was stated that regulations enable these Fish Processors to have processing plants and with that they are able to purchase fish from commercial fishers. They then process the fish and are able to sell to consumers, retailers and wholesalers, but only within Saskatchewan. Today, approximately 10% of the commercial fish

[9] Northern Saskatchewan Fisheries Infrastructure Program, September 11, 2000.

caught are purchased by these Fish Processors and subsequently sold to the Saskatchewan market. The status of the Fish Processors is:

- two operate year round processing plants and purchase fish from commercial fishermen in general;
- two dealers operate as commercial fishermen and process their own catch; and
- one operates a company, which imports, processes and markets both ocean and freshwater fish from a variety of suppliers. This company also purchases some commercial fish from Saskatchewan fishers and other fish processors.

The Fish Processor Program was developed to provide alternate sales opportunities for commercial fishers and to increase the availability of Saskatchewan commercial fish, particularly in retail stores and restaurants within the province.

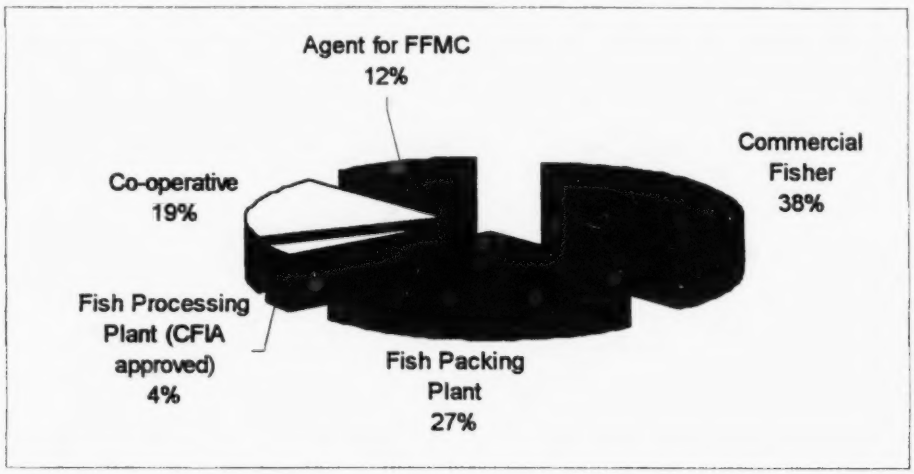
4.2.6 Freshwater Fish Marketing Corporation (FFMC) Agents

In the course of both interviewing and researching the training needs, it was found the Freshwater Fish Marketing Corporation was established in 1969 by the *Fish Marketing Act* for the provinces of Manitoba, Saskatchewan, Alberta, the Northwest Territories and northwestern Ontario. FFMC purchases from approximately 540 commercial fishers in Saskatchewan as a buyer, processor and marketing agent of fish from the commercial fishing lakes in its jurisdiction. FFMC has the exclusive rights to marketing and sales to the interprovincial and international trade. FFMC handles 14 species of fish with the main volumes being lake whitefish, pickerel (walleye), northern pike, lake trout, freshwater mullet and sauger (baby pickerel).

FFMC purchases the fish through agents located throughout the northern region of the province. There are nine appointed agents operating and are made up of a mixture of independent operators or agents, a commercial fishing co-operative and one FFMC owned agency. A number of these agents purchase from more than one commercial fishing co-operative membership. In some cases, these agents also hold a Fish Processor license and operate a processing plant in conjunction with the packing plant.

4.3 *Sectoral Profile*

The following chart provides a summary profile, of the 26 interviewed, of the types of business enterprises and operations, which flow from the commercial fishing industry. The chart also indicates the approximate percentages of the extent each make-up the industry as a whole.



5.0 Employment in the Commercial Fishing Industry

5.1 *Characteristics of Employment*

From the interviews conducted with the various industry representatives and stakeholders it was determined that the precise level of employment in the industry is difficult to assess, particularly because the industry is very seasonal. This means there are times when there are high numbers of seasonal and part-time workers and other times when there are only a few. From the research it was found that the total seasonal, part-time and full-time active employment in commercial fishing is estimated to be approximately 1,570. There are also a number of volunteers serving on the various fishing Co-operative Boards and Associations. They sometime receive income in the form of honorariums or per diems when performing duties on behalf of their organizations and in other cases do not. As well, there are a number of people who hold a commercial fishing license, but do not actively fish. Of those classified as employed in the industry, over 90% would be classified as commercial fishers and helpers. The following table provides a summary of the estimated total employment in the commercial fishing industry in Saskatchewan.

Table 3: Total Employment in Commercial Fishing

	Number	Percentage
Active Commercial Fishers	600	35.7%
Helpers	1,000	59.6%
Packing Plant Workers	52	3.1%
Processing Plant Workers	18	1.1%
FFMC Agents	9	0.5%
TOTAL	1679	100%

Source: Labour Market Activity Survey

Note: For commercial fishers, the 600 number identified is made up of the 540 commercial fishers who sell to FFMC and it is estimated there are over 50 commercial fishers operating in the province who do not sell to FFMC.

5.2 *Demographics*

The following questions were asked of the industry as they relate to the demographic profile.

5.2.1 What percentage of the people working in the industry are Aboriginal?

The industry employs a large number of Aboriginal people in relation to employment in other industries. This is highlighted in the chart below. The high proportion of Aboriginal people is reflective of the geographic location where the majority of commercial fishing occurs and the fact that over 90% of the 30,000 residents in northern Saskatchewan are of Aboriginal ancestry.

When the respondents were asked to estimate what percentage of their employees were Aboriginal, the responses were:

- 10% of the respondents employ 10% Aboriginal employees in their company;
- 10% of the respondents employ 55% Aboriginal employees in their company;
- 10% of the respondents employ 57% Aboriginal employees in their company;

- 30% of the respondents employ 99% Aboriginal employees in their company;
- 40% of the respondents employ 100% Aboriginal employees in their company.

The Co-operatives and the fishers who were interviewed indicate 70% of the commercial fishing businesses employ 99-100% Aboriginal fishermen. On average, 82% of people working in the commercial fishing industry are of Aboriginal ancestry. The Co-operatives were asked to estimate the percentage of Aboriginal employees in each commercial fishing business. The following chart shows that breakdown.

5.2.2 How many people are estimated to be working in the industry?

The following table shows how many people are employed in each of the occupations. The table also shows the number of expected employees in these occupations in 3 years, if the industry remains as it is. This is statistical information based on survey results.

Table 4: Current and Projected Employment Numbers

Occupation	Currently Employed	Employed in 3 years	Projected Employment if there were a Processing Plant
Commercial fishers	362	206	838+
Helpers	574	231	1540
Packing plant workers	26	13	117

The numbers employed in the industry will increase if there is more processing done within the province. However, the expectation is that those who already have licenses to fish will have first option to expand, therefore, the need for many new fishermen will be lessened. The new packing plant at Deschambault Lake will have the capacity to handle processing, but for now it will serve only as a packing plant. The same holds true for a number of other plants, and with the Northern Saskatchewan Fisheries Infrastructure Program in place, this is sure to create more opportunities to process fish.

The status from the findings show the commercial fishing industry is predicted to see a decline in numbers of fishers and helpers, but this decline will reduce to a number that is more productive and profitable. This will not have a negative impact on the volume caught and this will create the opportunity for greater income for those remaining fishers. The trend for the co-operatives has been to focus more on those fishers who are intent on being fishers as an occupation (prime source of income) rather those who almost treat it as a hobby. The end result will be better quality fish caught and shipped to market, and more income for those who are fishing.

5.2.3 What is the gender profile of the commercial fishing industry?

As illustrated in the following table, women accounted for approximately 16% of the total number of commercial fishing industry personnel.

The following chart shows the percentage of male and female fishers estimated to be working in the industry.

Table 5: Gender Profile of People in the Commercial Fishing Industry

Gender Profile of People in the Commercial Fishing Industry	
Gender	**Percentage of Total in Commercial Fishing Industry**
Female	16%
Male	84%
TOTAL Number in Industry	100%

5.2.4 Estimate the age of people working in the commercial fishing industry.

In terms of average age of the people working in the commercial fishing industry in Saskatchewan. It is estimated that just over 45% are aged 45 years or older, while less than 9% are younger than 24 years of age. Participants in the industry have expressed concern over the lack of younger people coming into the industry and have stated that this trend needs to be reversed, if the commercial fishing industry in Saskatchewan is to expand and strengthen. The following table shows the breakdown in percentage by age cohorts.

Table 6: Age of People Working in the Commercial Fishing Industry

Age of People Working in the Commercial Fishing Industry	
Age	**Percent**
Up to 24	9%
25-34	21%
34-44	25%
45-54	29%
55-64	16%
TOTAL	100%

5.2.5 Estimate the education levels of the people working in the industry.

The average education level for commercial fishers is not very high. Most fishers have some high school education but have not completed Grade Twelve (12). Thirty-four percent (34%) of Helpers have completed their grade twelve (12) with 58% having only some high school education. One hundred percent (100%) of Packing Plant Workers have some high school education.

Table 7: Education Levels

Education	% of Industry
Less than Grade 9	3%
Some High School	67%
Grade Twelve (12)	23%
Certificate or Diploma (Trades)	3.5%
University Degree, Certificate or Diploma	3.5%

6.0 Recruitment & Retention

6.1 *What barriers, if any do potential employees face when working in the industry?*

There are many barriers to employment in the commercial fishing industry. Some of the barriers include, low pay, short fishing seasons, and gaining the necessary experience. Most of the people interviewed who work in the commercial fishing industry have other employment. This sometimes takes precedent over going or coming back to work in the industry. It has been found that not very many new people are coming into this industry, especially the younger generation.

6.2 *What barriers do employers face in recruiting and retaining employees?*

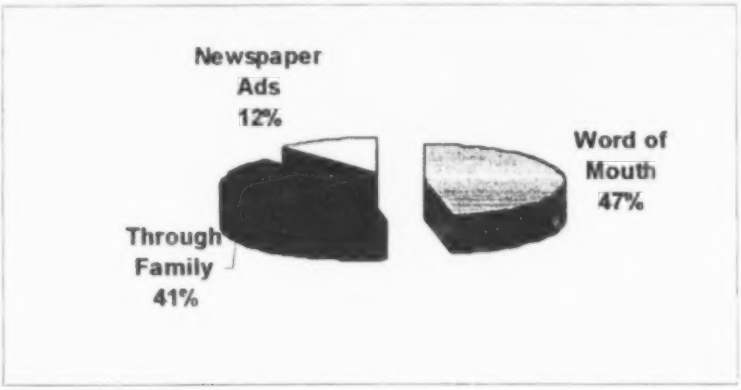
Employers face barriers to recruiting employees in this industry. They say it is very difficult for an employer to find skilled and knowledgeable employees because the commercial fishing season is often short with many operating during one season, the wages are not great, the work involves manual labour, and the skilled workforce in this industry is greatly lacking. There is a portion of the potential workforce not willing to work unless they are paid cash so as to continue collecting various forms of assistance from the government, be it Employment Insurance or Social Assistance.

6.3 *Do you consider turnover in the commercial fishing industry to be a problem?*

The industry people say that turnover in this industry is a problem for them. In fact, 87% of those questioned stated this to be true. It is difficult to pass on the knowledge and skills of the trained people in the industry to new people if they do not wish to come into or stay in the industry. The seasonality of the commercial fishing industry does not allow for other kinds of industry related employment. A good portion of the existing people in the industry have been around a long time and will be in a position to retire within the next 5 – 10 years, but there are no new people interested in taking their places. The apparent lack of support from FFMC, wages, and working conditions all contribute to the high turnover rate. The commercial fishing industry needs support, in this area, especially from FFMC in the form of more direct communication, consultation and training, if it is to survive and the industry needs to work to stop the declining interest in becoming employed in the commercial fishing industry.

6.4 *What is the most common method of recruitment used in the industry?*

Figure 1: Recruitment Methods



The most frequent method used for recruiting employees is by word of mouth (47%). People working and employed in this industry rely heavily upon family members and their community. People work in the industry because their fathers, mothers and grandparents work or have worked in the industry (41%).

7.0 Training

Training has long been recognized as key to the ability to this industry to be revitalized, as well as ensuring the workforce is capable and skilled in every aspect. Training must be very relevant to the ongoing development of the commercial fishing industry. In the past, training was an area which had received considerable attention particularly in the 1970's, but has fallen by the wayside in recent years. Through the research, it was clearly stated training is needed in the development and use of new and alternative technologies, fish handling, fish processing, safe food handling, biological fisheries assessment work, business skills and acquaculture techniques, along with co-operative board development and management. Providing training opportunities in or near home was identified as a means to recruit the younger or next generation into the industry. Training people to become experts in quality and efficiency was told by many as a means of becoming more productive and therefore making it more affordable to pay better wages that are more in line with the competing industries.

The research also revealed that no one occupation or job that exists in the industry today is seen as exempt from requiring some form of training.

Training was also identified as a means to preparing those who show interest in the industry, because they are going to be the future for this industry.

7.1 *What skills do people employed in the commercial fishing industry require?*

As with any other job or occupation, the commercial fishing industry is no different, those who work at these positions require the right amount of training and experience. They require a level of both technical skills and essential skills that make them competent. The simplest way to define these types of skills is "a capacity to do the job well".

During the course of conducting the research, very detailed information was found on the skills required for the key jobs or occupations from the industry people. The following tables describe the skills required for each occupation or job.

7.1.1 Commercial Fishers

Skills Required for the Job

Knowledge and Understanding Fishing

- Understanding the lake being fished;
- Recognizing weather patterns.

Technical Aspects of Catching Fish

- Proper use and care of nets;
- Proper method of setting nets;
- Proper method of monitoring nets;
- Proper method of pulling the nets;
- Proper removal of fish from nets;
- Proper use and care of fish locating equipment.

Care and Handling Fish

- Ensure proper icing and preparation at time of catch;
- Use of proper storage equipment (tubs, ice, etc.);
- Care in handling to avoid damage;
- Maintain clean and sanitary boat and storage containers;
- Prevent fish from being damaged;
- Recognize importance of quality control.

Operate Equipment

- Care in handling and maintenance of boat and motor;
- Care in handling and maintenance of snowmobile;
- Proper storage of equipment;
- Perform necessary repair work;
- Operate GPS equipment;
- Follow Proper safe work practices and habits.

Manage the Business

- Maintain accurate records;
- Perform bookkeeping functions;
- Supervise helpers, provide direction and instruction;
- Deal with fish agents, government officials, DFO, FFMC;
- Train staff on proper function;
- Follow proper OH&S regulations;
- Possess first aid and CPR certification/skills;
- Order supplies.

ESSENTIAL SKILLS

- Numeracy skills;
- Negotiating skills;
- Computer skills;
- Communication skills;
- Interpersonal skills;
- Having a good work ethic.

7.1.2 Helpers

Skills Required

Care and handling of fish - proper storage.
Set nets, pull nets, tie nets, handling of nets, repair nets.
Having a good work ethic.
Maintain equipment safely.
Sanitation and cleanliness.
Preparing and icing fish.
Safety.
Listen to jigger.
Know what a fisher does.

7.1.3 Packing Plant Workers

Skills Required

Care and handling of fish - proper storage.
Grading system, weighing and packing.
Proper icing procedures and temperature control.
Sanitation and cleanliness.
Preparing fish for shipping - labeling.
Safety.
Having a good work ethic.

7.1.4 Co-operative Boards

Skills Required

Roles and responsibilities as board members.
Proper manner in which to conduct board meetings.
Recording and reporting minutes of meetings.
Completing appropriate records both financial and operational.
Knowledge of the non-Profit Corporations Act.
Developing by-laws, policy and procedures.

7.2 *What training programs for the commercial fishing industry are available in the province?*

The findings reveal there are no formal training programs available in Saskatchewan, and for that matter there are none available in Northern Manitoba, Alberta and the Territories, for practitioners working in the commercial fishing industry at the present time. All training that is done is on the job and in a very informal manner. FFMC provides in-service training at its Winnipeg plant that focuses on processing, however, the costs are not recoverable and attendance is voluntary, which means very few, if any, fishers from Saskatchewan attend.

Throughout the study, it was heard time and time again, that training is key to the ongoing development of the industry, if the industry and its stakeholders are serious about revitalizing the commercial fishing industry in this province.

7.2.1 Freshwater Fish Marketing Corporation Pilot Training Project (Youth Program)

During the course of discussions with members of FFMC, it was found they are presently working on developing a program for fishers and packers with an emphasis on quality.

The following is a brief outline of the program, purpose and delivery options.

The program will be a pilot project and will take approximately 47 days to complete and will be delivered at the FFMC Plant in Winnipeg. It will consist of 17 days of classroom orientation on Quality Management Practices (QMP), Workplace Hazardous Materials Information System (WHMIS), hygiene, plant sanitation, sensory evaluation of fish for fish packers, and shippers. The remaining component will consist of 28 to 30 days of hands on training for the trainee.

This training is geared towards the Packers and Fishers about quality control in the food and fish processing industry. It will provide the participants with an appreciation of the work involved in receiving, grading, and transporting fish, dressing fish and quality control. Training will be conducted by a well-chosen combination of certified instructors and experienced FFMC personnel. Field trips to FFMC Agencies and clients will be utilized to emphasize and broaden the scope of the practical training received in the classroom environment.

The first pilot project intends to enhance employability for up to twenty (20) Winnipeg Urban First Nations youth including some practicing fishers. It will provide practical training in the fish and food processing sector and good quality food. The program will create a pool of trained personnel for Freshwater Fish Marketing Corporation, and increase the number of experienced staff on call.

It is possible that the pilot project can evolve into annual training program and continue to train and employ up to 40 First Nations people and fishers every year.

7.2.2 Identify those training areas that need to be addressed.

With the knowledge that the commercial fishing industry has a void of formal training offerings and that the industry is changing, there is a need to improve the skills and knowledge of the people in the industry in order to respond to the current demands. According to most respondents, both the experienced fishers and plant workers and the new employees require some form of training and updating.

In terms of training, every respondent, whether they were a fisherman, helper, member of the co-operative or an agent, indicated that those working in the commercial fishing industry (either entry-level or experienced) currently required some form of training or skills upgrading. As presented in the next table, the most commonly identified areas where training or upgrading is needed is quality control (proper care of the catch from the moment the fish leave the water till the catch is delivered to the packing plant and this encompasses the proper chilling, icing and packing in clean tubs), technology (using Global Positioning Systems), business management,

maintaining records, health and safety, fishing technology (trapnetting), computers and equipment repair and maintenance.

7.2.3 The commonly identified areas in need of training and updating.

The following table summarizes the most common areas that were identified by the needs assessment where the training needs to be focused.

Most Commonly Identified Areas in Need of Training or Updating	
Quality Control	Cleanliness, sanitation, proper icing and storage, procedures and maintaining quality standards of the catch from the time the fish leave the water to arrival at the plant.
Technology	Computer training and using new technology such as Global Positioning Systems (GPS) and programmable processing equipment.
Business Management	Interpersonal skills, supervisory training, train-the-trainer, working within regulations and laws, cost controls and budgeting.
Maintaining Records	Proper bookkeeping, record keeping, proper completing of forms and records such as Daily Catch Records, Bills of Lading, Income Tax, Record of Employment.
Health & Safety	Following occupation health and safety (OH&S) regulations, first aid, CPR, and WHMIS.
Fishing Technology	Use of trap nets, new equipment used today, keeping up-to-date, knowledge of the various bodies of water being fished and their differences.
Computers	Use in office environment, internet research and marketing.
Equipment Maintenance	Proper preventative maintenance programs, new techniques, new equipment on the market.
Board of Directors	Knowledge of roles and responsibilities as board members, proper method in conducting meetings more effectively and efficiently, and knowledge of the various acts and legislation governing co-operatives.

Comments from the respondents revealed that the younger people working in the industry tend to display poor work ethic and did not know the proper care and handling of not only the fish, but also the equipment used in the industry. The reasons given for these issues were varied. Some

said it was because young people of today are growing up on a society that has changed from the time of the older people working in the industry. Others stated that not a lot of attention has been given in passing down to the younger people the knowledge and skills and even the culture by the older generation. There is a recognized need to provide more attention to this and that it will take time. Respondents also stated that if this were to happen, more younger people would be encouraged to be interested in work in the industry. They all stated that there is more to working in this industry than one sees at first glance. There are many aspects, which, if known and promoted, would change the attitudes and perceptions about working in the industry. These include owning your own business and the freedom to work in places that allow you to adapt to your lifestyle.

7.3 *What are some of the difficulties encountered in achieving training objectives?*

The respondents have stated that up-grading, up-dating and refresher training are extremely important to the commercial fishing industry. Due to the fact that no training is available, the respondents did not identify cost, either course costs or books, as a factor. The following identifies some of the difficulties found when trying to achieve their training objectives.

Main Difficulties in Achieving Training Objectives

Type of Difficulty	Percentage of Total
Lack of Training in the Province	29%
Lacking Awareness About Training Options/Programs	18%
Accessibility to Training	18%
Availability/Capability of In-house Expertise	12%
Lack of Time	6%
Lack of Resources	6%
Logistics of Scheduling Training Sessions	6%
Cannot Afford to Take People off the Job for Training	6%
Cost of Training and Books	0%

Lack of training, lack of awareness about training and availability/capability of in-house training were the primary difficulties. This is attributed to the fact that there is no readily available training in this province for the commercial fishing industry.

7.4 *What would be the most effective way to deliver training?*

The lack of training in the province, the lack of awareness about training options and programs and accessibility to training are all factors that determine the type of training format selected by the industry people. The following chart summarizes the findings.

Type of Training	Percentage of Total
On-the-job Training	60%
Apprenticeship Type Training (Combination of school and on-the-job training)	20%
Short Course	20%
Technology-based Training	0%

As shown in the table above, practitioners expressed the most interest in on-the-job training. They also stated that in order to be better and more efficient in this mode, they would require support and training in facilitating on-the-job training. The high interest in this format reflects what has happened in the past, where little, if any training was directly targeted to those working directly in the industry, thus the only way many, if not all, learned their skills was on-the-job. They require training opportunities that are much more flexible and in smaller blocks of time than in traditional formats. Because a large number of the practitioners operate with a small number of employees and the fact that it's mostly family, they can not afford specialized training or courses, and the work sites are predominately remote. The respondents stated they require courses that are affordable and flexible in order to accommodate employers and/or company schedules. The off-season tended to be the preferred time in which to offer training, or just before the fishing season is to commence. There was limited knowledge of technology-based training delivery and many did not see this as reliable or efficient.

However, they did recognize the apprenticeship type of training format had merit, in that in-school type training and then applied to the job in sequence would enable the individual to return and use the newly acquired skills very quickly. This format was seen as applicable across all occupations in the industry.

The list of the types of delivery formats identified through the research are as follows:

- Apprenticeship - training to support OTJ training.
- Combination of on the job and entry level.
- Combination of classroom and on the job training.
- Combination of OTJ and apprenticeship style training. Mobile trainers to support OTJ like tree planting in AB.
- Demonstrations/workshops.
- Combination of theory and practical, with practical held right in the workplace.
- Combination - Classroom, OJT and Apprenticeship.
- Short seminar/workshops.

Further, the fact that no one selected technology based type of training indicates a need to educate and inform the industry more about this method of delivery.

7.5 *What are the training needs facing the industry?*

It has already been stated that there is a lack of formal training in the commercial fishing industry. This is a result of lack of resources and courses available in Saskatchewan. Some of the training needs identified include:

- knowing how long it takes for the fish to arrive at processing to ensure they arrive graded number one;
- understanding the length of time it takes to get to the plant and how the quality is affected by time/type trip (rough roads);
- restocking lakes;
- protecting fish habitat;
- processing and marketing at local level (burbot, mullet, roe);
- proper commercial fishing (i.e. the proper way to catch, dress, clean and properly and ice/pack fish for market);
- marketing and promotion (introducing younger people into the industry);
- because there are a large number of co-operatives, board training was seen by many as needed.

8.0 Other Issues

In addition to the issues directly related to training, the respondents were asked about other issues.

8.1 *What are some of the forces effecting change on the industry?*

Technology will affect the commercial fishermen to a degree and will increase over time. They will have to learn computerized bookkeeping, how to use Global Position Systems (GPS) (which is already there but not used regularly by the fishermen), mapping of lakes on computer, being Hazard Analysis Critical Control Points (HACCP) compliant, and how to access and use the internet for marketing purposes. Marketing is going to be more and more important and fishermen will need look at other potential markets such as underutilized species (mullet, burbot), as well as playing an active role with the co-operatives.

In addition, it was found that a significant proportion of those now working in the industry are at a stage in their lives where they are considering leaving the industry through retirement or more lucrative employment in other sectors, such as forestry.

The following diagram summarizes the numerous factors or focus which are causing the commercial fishing industry to change.

Figure 2: Forces Effecting Change

8.2 *What do you see as needed when coping with technology?*

The commercial fishing industry will have to rely on training to cope with the technological changes of the times. It is of the utmost importance in the commercial fishing industry as there does not appears to be any directly related training available for the commercial fishermen in Saskatchewan and other provinces. Education and training will be required to help improve the quality of the products and efficiencies in fishing.

8.3 *What are some of the factors influencing growth?*

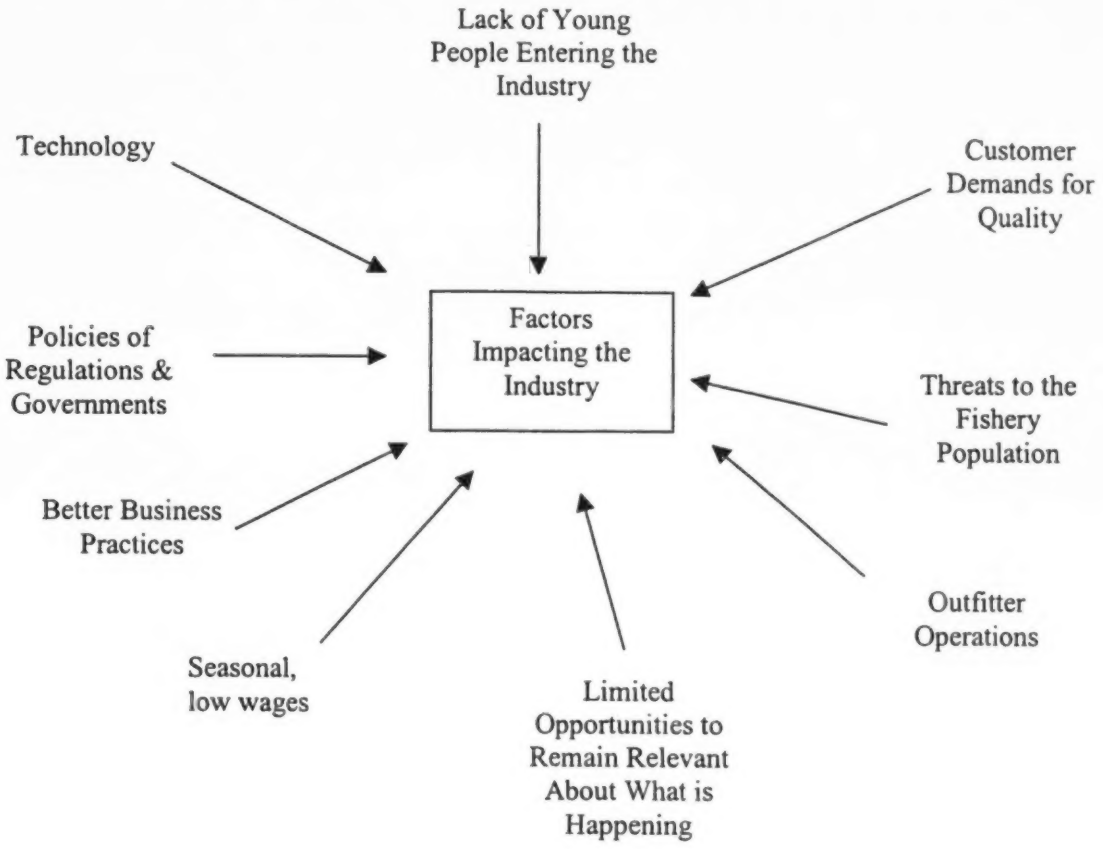
The people in the industry were asked whether certain factors hampered their growth. The following list summarizes the respondents' factors:

- need for more value-added processing especially for the under-utilized species;
- infrastructure, replace packing facilities and equipment;
- marketing, create a demand for their product;
- difficulty recruiting new, younger people into the industry;
- the lack of any sustained training to assist their operations;
- the availability and access to income and employment support programs.

8.4 *What do you see as areas that are impacting the industry?*

The commercial fishing industry is not unlike the other industry sectors n the province, however, due to the years of where there was not a lot of attention and support given this industry is somewhat of a disadvantage. This along with the move into the information age has raised a large number of factors which are impacting the industry. The following figure reveals some of these main factors.

Figure 3: Factors Impacting the Industry


Lack of Young People Entering the Industry
Technology
Customer Demands for Quality
Policies of Regulations & Governments
Factors Impacting the Industry
Threats to the Fishery Population
Better Business Practices
Outfitter Operations
Seasonal, low wages
Limited Opportunities to Remain Relevant About What is Happening

9.0 Conclusions

The findings of the needs assessment indicate a number of broader conclusions that have implications for government, educational and training institutions, and the commercial fishing industry employers with regard to human resources, training and development. Overall, the findings describe an industry that has been void of any sustained formal training and capacity building. Consequently, what has happened in the past can't continue and the stakeholders need to be challenged to work in partnership to assess the situation and to adopt or develop new strategies.

Employment Growth Opportunities in the Commercial Fishing Industry

The survey showed that there is potential for a small growth in the workforce due to market opportunities for the under-utilized species and should more value added processing operations begin in the province.

The largest opportunity/growth will occur over the next 10-15 years when the existing workforce reaches the age of retirement. In addition, a number of people are leaving to access employment opportunities opening up in other industries which are occurring at or near where they presently live.

Therefore, as a result and even though the industry research has shown is not expected to experience a large increase in numbers in the workforce, there are and there will continue to be job opportunities in the industry to replace existing workers. Should processing capacity be expanded in the province this will also add potential for significant employment opportunities.

Youth Employment Programs are Critical Labour Force Development Tools

Employers recognize the younger generation are not readily or willingly entering the workforce. They cite as a barrier to employment the absence of promoting and encouraging the young people to consider the commercial fishing industry, low wages, seasonality of work and the physical requirements of the job.

The respondents indicated that training youth using co-op education, work placements and youth internship programs would provide an important resource to encouraging and assisting young people to gain employment in the industry.

There are a number of income and employment support programs where employers would benefit from such programs as wage subsidies, workplace training for the unemployed and transition into the workplace. This would enable them to hire new job entrants and train them properly and at the same time this would result in a lower cost to them while these new employees learn the practical aspects of their work. Improvements to these programs with regard to scheduling and length would also be a value to employers.

Emerging Human Resource Issues Will Require New Strategies

Putting it all together including the trends reported in this study and the need for improving the industry through training suggests a requirement for a more proactive approach to the managing of human resources. The survey responses suggest that people in the industry are aware of many of the issues presented in this study. A number of areas were identified where improvements could be obtained through introduction of better practices in human resource development. They included:

- succession planning to respond to expected retirements and people leaving to work in other industry sectors;
- explicit recruitment and retention strategies to attract new, younger people and retain established workers in times of high labour demand, including use of training and skill development or career planning;
- prior learning and recognition in response to the establishing of this industry as very viable and that opportunities to grow personally and professionally exist.

Skill Shortages Expected

While the skill shortages that exist have not been a concern among employers in the past, the rising issue over the need for better quality of the product the customer is demanding and how this relates back to where the fish are first caught and handled is making it more evident workers lack some basic skills. Factors identified in the study as to why a skill shortage exits include:

- persistent difficulties continue with the lack of skills of people working in the industry in such areas as quality control, emerging technology, business management, computers and safety;
- a large proportion of the more senior and seasoned workforce are approaching retirement age as well there are those who are departing the industry for other employment which could create a major gap in skills and knowledge; and
- the fact the industry is made up of small employers, which restricts them to analyze or forecast long-term planning because they individually have limited financial resources.

More generally, the survey showed the commercial fishing industry practitioners have very little high level training. Their skills have been acquired through working and observing on the job. The learning has been very informal and quite often what is being learned is not conducive to producing a quality product for processing.

The consequence of facing continued skill shortages within the workforce could result in reduced potential for growth and profitability within the industry. The majority of those surveyed noted their growth is hampered by the skills that are lacking within themselves and their employees.

Respondents identified two particular ways to address the skill shortages expected. They are:

- the need to address and recognize succession planning and prior learning assessment and recognition as ways to improve the level of skills and knowledge of the workforce; and

- the need to develop and invest in training programs to enhance the capabilities of the current workforce and to develop the basic entry level skills of new entrants into the industry.

Need for a Co-ordinated, Sector-Wide Response

The human resource and training issues identified in the study present significant challenges for the commercial fishing industry. The structure of this industry is such that individuals working in the industry or organizations are unlikely to resolve these challenges independently. Most operators are very small in size with limited internal capacity.

The situation is further complicated by the fact that the practitioners in the industry are spread across a large geographic area of the province and often have their work sites in remote locations.

Finally, as was previously identified, there are no directly related training opportunities available through educational institutions and their challenge will be to respond to the workplace requirements, which are many and diverse.

With such a broad range of players, there is a clear need for effective communication and planning that is inclusive of all the players.

10.0 Key Findings

The following summarizes the key findings from the research and consultations that have taken place over the course of the study of the Human Resource and Training Needs of the Commercial Fishing industry in Saskatchewan.

Workforce Profile

- The number of commercial fishers selling to FFMC over the past ten (10) years has remained relevantly stable;
- Eighty-two (82) percent of the people working in this industry are of Aboriginal ancestry;
- It is estimated that 84% of the people working are male;
- A very small percentage, approximately only 9% of the workforce is under the age of 24 while just over 45% are 45 years of age and older; and
- Sixty-seven (67) percent of the workforce have some high school education.

Recruitment and Retention

- Employers have said it is difficult to find skilled and knowledgeable workers;
- Word of mouth and networking through family members have been the main methods of recruiting workers;
- The seasonality of the work, low wages ($5,818 per person in 1998/99) and the manual work involved were cited by employers as the three main barriers to both the recruitment and retention of employees;
- The research found that the availability of other job opportunities in other sectors that are now operating in their or near their home communities is the cause of people not wanting to enter the industry.

Training

- The industry has gone through a lot of years in time where no training has been made available for the workers;
- There is no formal school type training offered in the province;
- Every occupation or job in the industry requires some form of training and upgrading;
- On-the-job training was the most commonly selected delivery option;
- Training is recognized as a necessity, if the industry is ever going to be revitalized.

11.0 Recommendations

The following recommendations were developed by the Commercial Fishing Industry Sector Partnership Steering Committee based on the results of the research, the consultation process and the experience and expertise of the members themselves. The Steering Committee will be responsible to lead and direct the implementation of these recommendations in partnership with their stakeholder representatives.

11.1 *Comprehensive Training Initiative*

Recommendation:

The Sector Partnership Steering Committee will work with education and training providers to develop a comprehensive training initiative to address all aspects of the industry including from the lake to the departure of the fish for the processing plant.

Strategies

- Training fishers to take proper care of their catch from the time it leaves the water till it is delivered to the plant.
- On-the-job training of plant workers in both hand filleting and mechanized filleting machine operation for processing the fish.
- Training on-the-job of the proper grading and packing of fish by the plant workers to be export ready.
- Undertaking a comprehensive study on the type of training that is needed in order to be Hazard Analysis Critical Control Point (HACCP) compliant.
- Training regarding the inspection agency system locally and abroad and the implementation of on-going inspection.
- Develop and deliver training on the principles of a co-operative in order to facilitate and operate well organized and well run co-operatives.
- Deliver the training within or as close as effectively possible to the respective communities where fishers, plant workers and co-operatives reside to reduce the cost and eliminate the need to travel out of the community.
- Arrange and meet with the various funding agencies to discuss those programs which can assist the hiring of workers and enable them to make the transition in the workforce.
- Prepare and deliver business skill training for the operators and the co-operatives.
- Develop and deliver a workplace trainer course to develop local capacity in order to have good teachers to show and explain the proper way to learn the skills needed through training.

11.2 *Increased Youth Participation*

Recommendation

Promote career opportunities for youth in the industry and the related areas to rejuvenate the industry.

Strategies

- Encourage youth to take classes in the sciences – biology.
- Arrange to have practicing commercial fishers speak at career days.
- Promote career opportunities outside of direct fishing, such as Department of Fishers and Oceans and in the processing/inspection occupations.
- Train and employ skilled fishers, to be teachers/mentors and use them to deliver training within their home communities or regions of the province.
- Adapt the Fresh Water Fish Marketing Corporation'sYouth program to be able to deliver it in different areas of the province to train youth.
- Utilize the younger fishers already working in the industry to attract other youth into the industry.
- Provide these young people (fishers) with the skills and tools to do this recruitment, then use them as mentors and role models to keep the youth in the industry:
  - Training and development;
  - Promotional material, get them into schools across the north;
  - Career planning.
- Promote the co-operative principles to create effective and efficient co-operatives, who in turn can focus on developing the talents of the youth and offer employment opportunities.

11.3 *Industry Image*

Recommendation

The Steering Committee will work with its partners to create a positive image of the industry in order to sustain itself and to renew it with more youth entering the workforce.

Strategies

- Promote and speak about the positive things that are happening in the fishing industry in northern Saskatchewan to develop ways of getting the message out by undertaking things like:
  - Doing promos on Mississippi Broadcasting Corporation in the native languages of the north (Cree, Dene and English);
  - Interview people to get their comments on what's happening in the industry;
  - News articles in northern and Aboriginal newspapers;
  - Word of mouth is the most important to get the message out;
  - Use the Band schools and non-Band schools to promote the industry; and
  - Educate the public through the Elders, Senators, Band Chiefs and Councils.

11.4 *Improved Communications*

Recommendation

There is a need by the Steering Committee to improve communications by using the Sector Partnership to approach and address the issues found in this study.

Strategies

- Develop strategies to "work together";
- Work with the Department of Fisheries and Oceans (DFO) and other related organizations to examine employment opportunities for work in related jobs in the industry;
- Explore the co-op training model as a way to approach training;
- Share the results of the study with the representative stakeholder organizations and agencies.

11.5 *Economic Viability of the Industry*

Recommendation

The Steering Committee and the industry work together to continue to exchange and implement ways to increase revenue potential and do things that they have control over by working with FFMC, training providers and government to improve ways to increase potential earning power of the industry for sustainability.

Strategies

- There are certain areas the fishers and co-operatives through the following activities can increase their revenues and thus the economic viability of the industry:
  - Upgrading the skill levels of the people in the industry;
  - Learning new technologies;
  - Youth coming into the industry with a good set of skills that will make a difference;
  - Putting a good quality product that's ready for processing;
  - Work with FFMC to study the feasibility of establishing processing capabilities in the province which will increase revenue and add value added products that could go directly to market or on to FFMC in Winnipeg; this will create a need for further training in such areas as:
    - Feasibility studies;
    - Business planning and financing;
    - Technician skill development in processing;
    - Knowledge of processing;
    - Marketing and sales opportunities.
  - Develop the necessary training options that will be required for the processing plant operations.

11.6 *Resource Management*

Recommendation

The Steering Committee along with the SCFCFL work together with organizations like SNA, SERM, DFO and FFMC to assist the industry to be managers of their own resource.

Strategies

- Use the expertise available to:
  - Protect fish habitat;
  - Work together with a common purpose;
  - Learn roles and use the expertise of the organization to manage their resources;
  - Educate and inform governments and the public on what's happening in and on the lakes fished;
  - Share information to make it better for everyone;
  - Recognize the knowledge of the people in the industry, because they have a wealth of knowledge and experience;
  - Train the public and the community leaders;
  - Work to make the change for the better for the long term in order to sustain the industry.

12.0 Next Steps

Over the coming months the Steering Committee in co-operation with key stakeholders will call an meeting to discuss the next steps required to implement the recommendations and organize to undertake the following:

- Develop an effective northern/southern user-friendly communication strategy to ensure the distribution of the study and the results are effectively communicated to all the relevant stakeholders.
- Arrange meetings with the education and training providers to prioritize and implement the relevant training needed for all facets of the industry.
- Explore avenues for potential funding and accessing available resources of and through the partners for on-going sustainability of the Sector Partnership.
- Undertake a review of the existing Steering Committee structure and membership to determine whether additional members are needed and who they may be.
- Prioritize the recommendations and strategies.
- Examine the various programs which are available for employers and the sector that will aid the hiring of new employees and prepare them to make the transition into the commercial fishing industry.

APPENDIX A: Education and Training Database

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APPENDIX A: Education and Training Database

DISCLAIMER:

The information provided in this education and training database is in no way complete and concise. There is very limited commercial fishing training in Saskatchewan. A list of programs itemizing individual courses from various programs not specifically related to Commercial Fishing has been included as some of these courses could be adapted or applied to the care and handling of fish, as well as the management of a commercial fish business. The database identifies some of the key providers and some of the programs they offer. To obtain a complete list and particulars about a program or course, contact information for the providers has been listed.

Commercial Fish Education & Training Database

BRITISH COLUMBIA INSTITUTE OF TECHNOLOGY

3700 Willingdon Ave., Burnaby, BC V5G 3H2, 604-434-1610, Fax: 604-433-1184, Web: www.bcit.bc.ca/

Fish, Wildlife and Recreation (Renewable Resources)

CAPILANO COLLEGE

2055 Purcell Way, North Vancouver, BC V7J 3H5, 604-986-1911, Fax: 604-984-4985, E-mail: advising@capcollege.bc.ca, Web: www.capcollege.bc.ca

Fisheries Science

COLLEGE OF THE NORTH ATLANTIC

P.O.Box 5400, Stephenville, NF A2N 2Z6, 709-643-7729, Fax: 709-643-7843, E-mail: info@northatlantic.nf.ca, Web: www.northatlantic.nf.ca

Fish and Wildlife Technician

DALHOUSIE UNIVERSITY

236 Henry Street, Dalhousie, NS B3H 3J5, 902-494-2450, Fax: 902-494-1630, E-mail: admissions@dal.ca, Web: www.dal.ca

Fisheries Engineering

FISHERIES AND MARINE INSTITUTE OF MEMORIAL UNIVERSITY OF

P.O. Box 4920, St. John's, NF A1C 5R3, 709-778-0497, E-Mail: roneill /regist@gill.ifmt.nf.ca, Web: www.ifmt.nf.ca

Fisheries Development

LETHBRIDGE COMMUNITY COLLEGE

3000 College Drive South, Lethbridge, AB T1K 1L6, 403-320-3200, 1-800-572-0103 (in Canada only), Fax: 403-320-1461, admissions@lethbridgecollege.ab.ca, Web: www.lethbridgecollege.ab.ca

Fish and Wildlife Technology

MALASPINA UNIVERSITY-COLLEGE

900 Fifth Street, Nanaimo, BC V9R 5S5, 250-753-3245, Fax: 250-755-8725

Fisheries and Aquaculture

National Seafood Sector Council

85 Albert Street, Suite 1505, Ottawa, ON K1P 6A4, 613-782-2391, F 613-782-2386, E-mailL info@nssc.ca, Website: www.nssc.ca

Factory Clean-Up
Orientation
Revised Quality Management Program (QMPR)
Personal Hygiene and the Fish Fillet
Facilities and Equipment
WHIMIS
Introduction to HACCP

NICOLA VALLEY INSTITUTE OF TECHNOLOGY

P.O. Box 399, Merritt, BC V1K 1B8, 604-378-3300, Fax: 604-378-3332

Natural Resource Technology (Fish Option)

SAULT COLLEGE OF APPLIED ARTS AND TECHNOLOGY

443 Northern Ave., Sault Ste. Marie, ON P6A 5L3, 705-759-6700, 800-461-2260, Fax: 705-759-3273,
E-mail: jim.erb@saultc.on.ca, Web: www.saultc.on.ca

Fish and Wildlife Technician

SIAST - Woodland Campus

2nd Floor, Registrar's Office, 1100 - 15 Street East, Prince Albert, SK S6V 6G1, 306-953-7137, 1-800-667-9664,
Fax: 306-953-7160

The majority of programs are offered at Woodland Campus, however, some of the programs are offered at other campus locations across Saskatchewan (i.e. Kelsey Campus - Saskatoon).

Integrated Resource Management - Diploma
- *Aquatic Surveys I*
- *Fisheries Management I*
- *GIS for Resource Managers*
- *Fish Products II*
- *Fish Products I*
- *Fisheries Management III*
- *Fisheries Management II*
- *Resource Management*

Fisheries Technician - Certificate
Integrated Resource Management
- *Computer Applications I*
- *Communication Skills I*

GPS for Recreational Users
Introduction to GPS for Resource Managers
Meat Processing - Certificate
- *Meat Processing Theory I*
- *Meat Processing Theory II*
- *Meat Processing Lab I*
- *Meat Processing Lab II*
- *Meat Processing Lab III*
- *Meat Processing Lab IV*

Institutional Cooking - Applied Certificate
- *SK Sanitation Training Program*

Professional Cooking - Certificate
- *Mathematics*
- *Management I*
- *Management II*
- *Meat, Seafood and Poultry Processing*
- *Sanitation I*
- *Sanitation II*
- *WHMIS*

Hotel and Restaurant Administration - Diploma
- *Accounting*
- *Intermediate Computer Applications*
- *Interpersonal Communication*
- *Food and Beverage Cost Control*
- *Written Communications*
- *Food Safe Level I*
- *Food Safe Level II*
- *Front Office Computers*
- *Financial Management*
- *Supervisory Techniques*

Food and Nutrition Management - Diploma
- *Firs t Aid and CPR "A"*
- *Introduction to Computers*
- *Introduction to WHMIS*
- *Safety*
- *Human Resource Management*

Short Order Cooking - Certificate
- *Safety and Sanitation*

Note: The above programs are directly related to the fishing industry, however, it should be noted that several institutions in Saskatchewan offer business management and bookkeeping programs that industry identified as a skill need in the report.